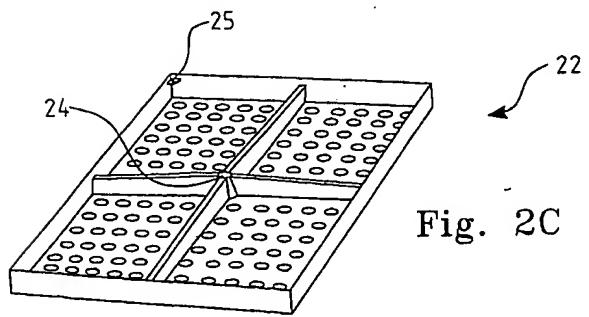
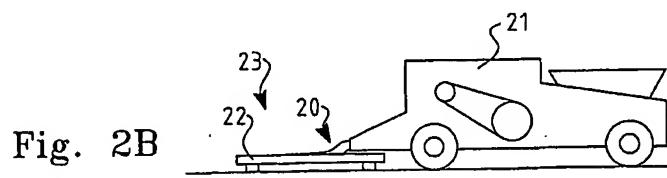
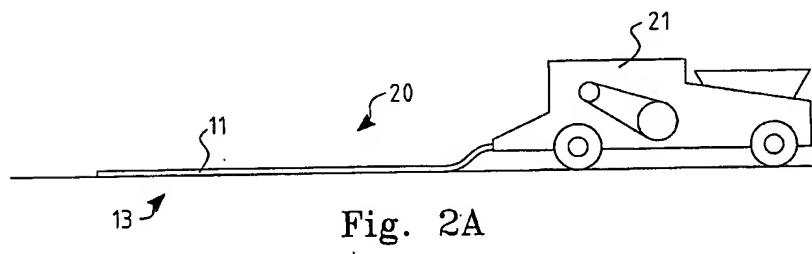
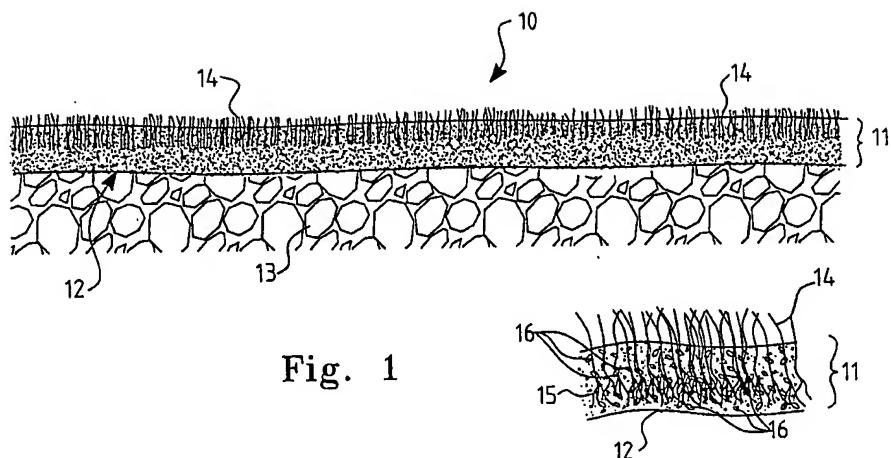


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**Performance Testing
for
Recycled Rubber Replacement Soil Based Turf Growing Medium**

Test Description	Trial No. 1	Specification Acceptance Range
Field Testing	2/8/01	
Football Rebound Resilience	50%	20 to 50%
Clegg Impact Soil Tester Rating	20	20 to 80g
Traction	42 N.m	Minimum 25 N.m Preferred
Distance Rolled by a Football	4.1m	3 to 12m Preferred
Surface Evenness	3.0mm	Maximum 8mm Standard Deviation Preferred
Depth of Grass		20mm
Type of Grass		Kikuyu
Thickness of Rubber Profile		75 to 80mm
Ball		REAL: Size 5:437.8g+

Notes:

- Specifications from Standards for the Playing Quality of Natural Turf for Association Football by P.M Canaway, M.J Bell, G Holmes and S.W. Baker
- + Calibrated inflation to rebound between 57 to 59% when dropped onto concrete and a drop height of 3m.
- Clegg Impact Hammer: Mass 0.5kg ; Drop 300mm ; 50mm Diameter
- Weather conditions: Fine, dry and between 17 to 20° Celcius
- The rubber soil profile was moist and the test area was made up 1.1m square plates of the grass rubber soil profile

Fig. 3

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**Performance Testing
for
Recycled Rubber Replacement Soil Based Turf Growing Medium**

Test Description	Trial No. 2	Specification Acceptance Range
Field Testing	2/8/01	
Football Rebound Resilience	49%	20 to 50%
Clegg Impact Soil Tester Rating	15	20 to 80g
Traction	59 N.m	Minimum 25 N.m Preferred
Distance Rolled by a Football	4.1m	3 to 12m Preferred
Surface Evenness	2.3mm	Maximum 8mm Standard Deviation Preferred
Depth of Grass		20mm
Type of Grass		Kikuyu
Thickness of Rubber Profile		90mm
Ball	REAL: Size 5:437.8g+	

Notes:

- Specifications from Standards for the Playing Quality of Natural Turf for Association Football by P.M Canaway, M.J Bell, G Holmes and S.W. Baker
- + Calibrated inflation to rebound between 57 to 59% when dropped onto concrete and a drop height of 3m.
- Clegg Impact Hammer: Mass 0.5kg ; Drop 300mm ; 50mm Diameter
- Weather conditions: Fine, dry and between 17 to 20° Celcius
- The rubber soil profile was moist and the test area was made up 1m square plates of the grass rubber soil profile

Fig. 4

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**Performance Testing
for
Recycled Rubber Replacement Soil Based Turf Growing Medium**

Test Description	Trial No.3	Specification Acceptance Range
Field Testing	2/8/01	
Football Rebound Resilience	45%	20 to 50%
Clegg Impact Soil Tester Rating	22	20 to 80g
Traction	42 N.m	Minimum 25 N.m Preferred
Distance Rolled by a Football	-	3 to 12m Preferred
Surface Evenness	3mm	Maximum 8mm Standard Deviation Preferred
Depth of Grass		15mm
Type of Grass		Couch
Thickness of Rubber Profile		70mm
Ball		REAL: Size 5:437.8g+

Notes:

- Specifications from Standards for the Playing Quality of Natural Turf for Association Football by P.M Canaway, M.J Bell, G Holmes and S.W. Baker
- + Calibrated inflation to rebound between 57 to 59% when dropped onto concrete and a drop height of 3m.
- Clegg Impact Hammer: Mass 0.5kg ; Drop 300mm ; 50mm Diameter
- Weather conditions: Fine, dry and between 17 to 20° Celcius
- The rubber soil profile was moist and the test area was made up 1.1m square plates of the grass rubber soil profile

Fig. 5

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**Performance Testing
of
Turf Growing Medium**

Test Description	Trial Rubber	Trial SFS	Trial SCG	Specification Acceptance Range
Field Testing	2/8/01	16/8/01	16/8/01	
Football Rebound Resilience	50 %	38 %	45 %	20 to 50%
Clegg Impact Soil Tester Rating	20 g	13 g	16 g	20 to 80g
Traction	42 N.m	55 N.m	65 N.m	Minimum 25 N.m Preferred
Distance Rolled by a Football	4.1 m	3.8 m	4.7 m	3 to 12m Preferred
Surface Evenness	3.0 mm	4.8 mm	1.8 mm	Maximum 8mm Standard Deviation Preferred
Type of Profile	Rubber	Sand/Soil	Sand	
Depth of Grass	20 mm	20mm to 35mm	25mm to 30mm	
Type of Grass	Kikuyu	Couch Legend	Couch Legend	
Thickness of Soil Profile	75mm to 80mm	> 300 mm	300mm	
Ball				REAL: Size 5:437.8g+

Fig. 6

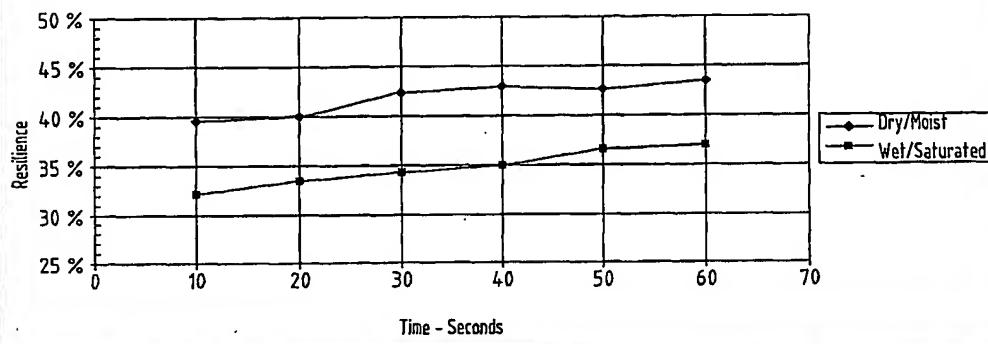
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resilience test results

Client:	<i>Stratum Environmental Tech Pty Ltd</i>	date:	<i>24 October 02</i>
Principal:		tested by:	<i>JR</i>
Project:	<i>Material Assessment</i>	checked by:	<i>JR</i>
Location:	<i>Wetherill Park</i>	job no.:	<i>SL 4219/1</i>

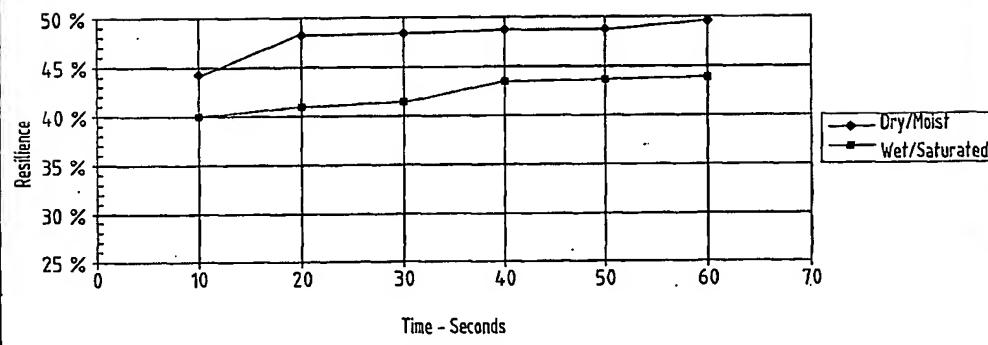
Rye - Oversown

Media depth 96 mm - Grass depth 30 mm



Fescue

Media depth 105 mm - Grass depth 26 mm



remarks:

Specifications from the "Standards of the Playing Quality of Natural Turf for Association Football" by P.M. Canaway; M.J. Ball; G Holmes; and S.W. Baker, calls for a football Rebound Resilience of between 20 % and 50 %. As can be observed from the above graphs, even when the profile is saturated, the rebound resilience meets this criteria and apparently performs similarly as the partially saturated profile.

Fig. 7

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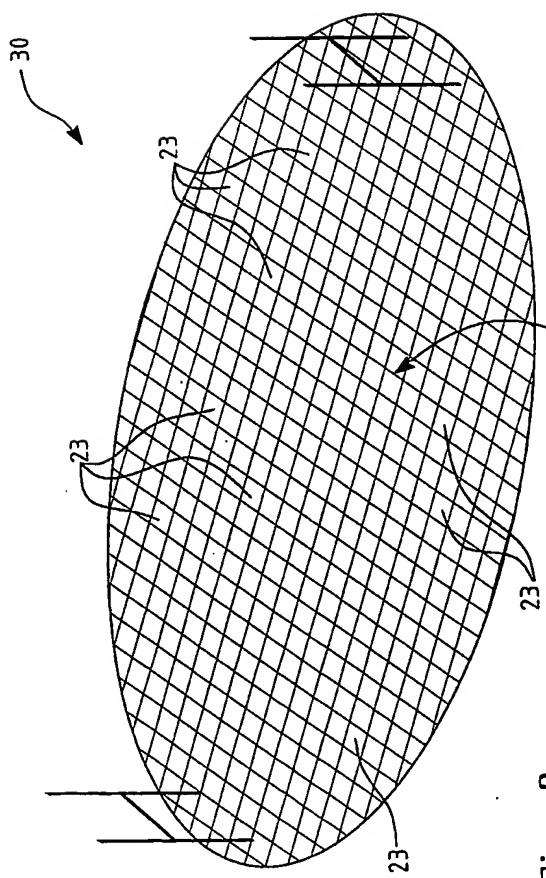


Fig. 8

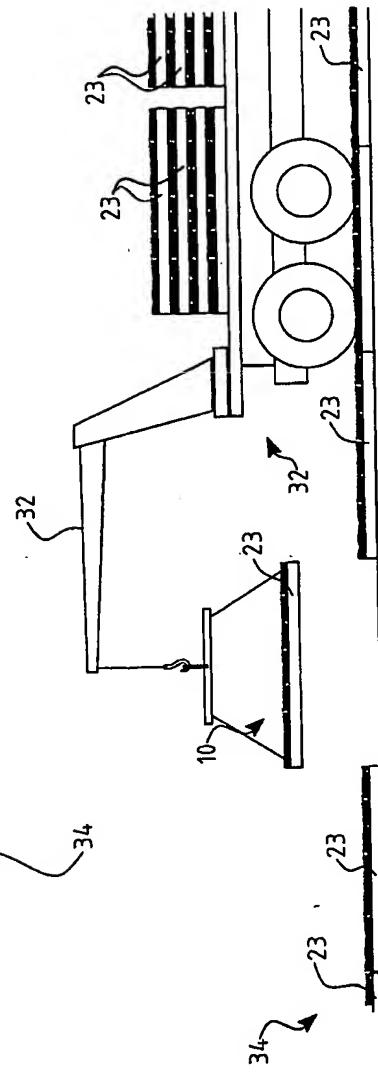


Fig. 9

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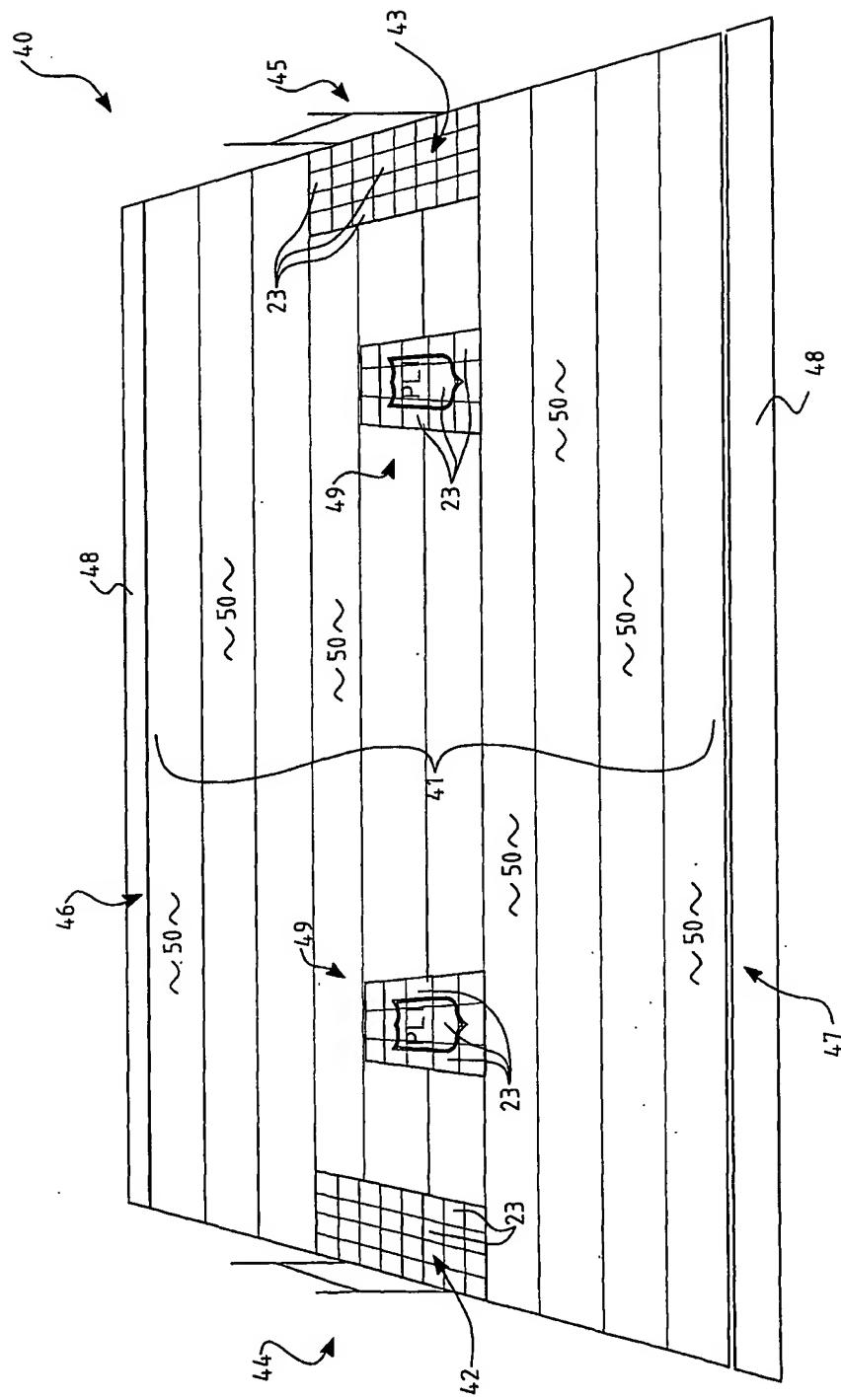


Fig. 10

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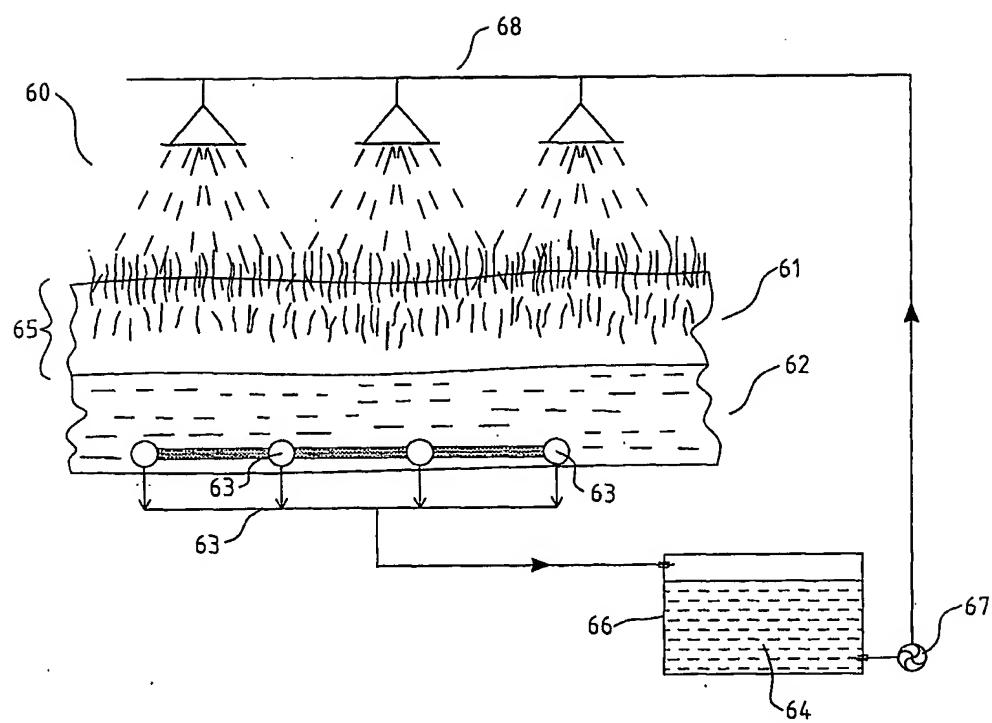


Fig. 11